

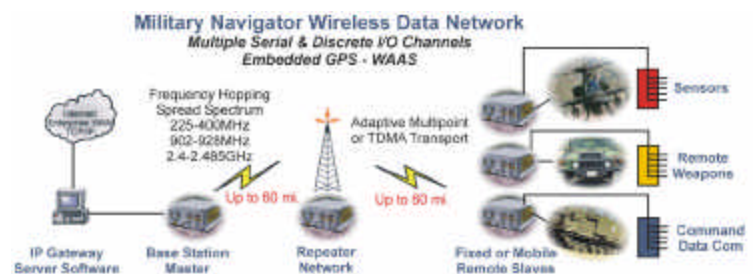
# Intuicom Military Navigator



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## VENDOR DESCRIPTION

Intuicom's Military Navigator™ provides wireless, secure, high-speed, bi-directional data communications and is available with embedded DGPS WAAS/EGNOS or RTCM-104 for sub-meter position accuracy. Utilizing advanced jam-resistant, frequency hopping spread spectrum technology, the Military Navigator operates on military VHF/UHF frequencies (or unlicensed ISM bands upon request). Up to three RS-232 serial and discrete I/O (4 inputs & 3 outputs) ports are easily accessible for simplified command, control, and communications with remote sensors and assets. Bundled with network server software, communications data (with embedded unit ID) and the GPS data stream (position, location, velocity, and altitude) are available as easy-to-access IP sockets for simplified integration with third-party applications. Incorporating a user-friendly menu interface, the Military Navigator can be configured as a master, slave/remote, repeater, or slave/repeater for operation in point-to-point, point-to-multipoint, and TDMA systems.



### Product Manager

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CDR

## Hardware

Power: 16 Watts typ., 12VDC	Cooling: Ambient air	Data & Power Interface: Fischer connectors
Weight: 1.5kg (incl. processor)	Operating Altitude: 0 to 60,000 ft.	99.98% of Missions Completed without Failure
Size: 70mm H x 165mm W x 225mm L	Operating Temp.: -30°C to +75°C	MTTR: <1 hour
Antenna Weight: Application-specific	Storage Temp.: -40°C to +85°C	Enclosure: Weatherproof aluminum w/ mtg. flange

## Performance

Frequency: 225 to 400MHz Std. (902-928MHz or 2.4-2.485GHz available – see Navigator II <u>Transceiver</u> specifications)	Modes: TDMA, Adaptive Multipoint, point-to-multipoint, point-to-point, store-and-forward repeater	Optional GPS <ul style="list-style-type: none"><li>■ Parallel Tracking Channels: 12</li><li>■ L1 Freq: 1.575 MHz</li><li>■ Code: C/A std. (PPS - P/Y code; L1/L2 with SASM under development)</li><li>■ Differential Corrections: WAAS or RTCM-104</li><li>■ Position Accuracy:<ul style="list-style-type: none"><li>&lt;1m CEP, WAAS or RTCM-104</li><li>&lt;5m CEP without SA imposed</li></ul></li><li>■ Time to First Fix: 15 sec. (hot); 2 min. (cold)</li><li>■ Position Update Rate: Selectable to 1 Hz (10Hz optional)</li><li>■ Re-acquisition Time: &lt;1 sec</li></ul>
Technology: FHSS (Frequency Hopping Spread Spectrum)	Link Throughput: 115.2 Kbaud	
RF Output: 4 Watts Std.	Encryption: Dynamic key substitution	
Range: 20+ miles per link (line of sight)	Error Detection: 32 bit CRC	
Sensitivity: -103 dBm at 10 <sup>-6</sup> raw BER	Interface: RS-232; 1200 to 115.2kbps	
Selectivity: 40 dB at fc ± 230 kHz	Ports: Dual RS-232 and one discrete with 4 inputs & 3 outputs (available with three RS-232 & no discretes)	
Modulation: GFSK, 2 levels	Data Flow: Full duplex	